IN THE SPECIFICATION

Please amend the specification as follows:

1. On page 11, line 8-10, please amend as follows:

According to the present invention, there is provided a data processing apparatus for scrambling data ~~which are under being transferred or de-scrambling data~~ which are under being transferred or de-scrambling scrambled data which are being transferred, which comprises: an ID storing section which stores an ID information relating to a sector which is a scrambling block unit of data under being transferred, which ID information is set by a central processing unit; a sector counter section which counts the number of the sectors in the data under being transferred; an operation section which adds the ID information from the ID storing section and the sector number information from the sector counter section, a scramble seed value table conversion section which converts the addition result which is inputted from the operation section into a scrambling seed value; a scramble filter of at least one byte which, making a period during which data of a predetermined length is transferred one cycle, produces a next cycle scramble seed value from the present cycle scramble seed value; a selector which selects a scramble seed value which is outputted from the scramble seed table conversion section when the data to be transferred is data at a top of a sector, and selects the scramble seed value which is outputted from the scramble filter section otherwise, to output the selected result to the scramble filter; and the data under being transferred being scrambled or the scrambled data under being transferred being de-scrambled using the scramble seed value which is outputted from the selector.

2. On page 11, line 25 and page 12, line 1, please amend as follows:

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According to the present invention, there is provided a data processing apparatus, which comprises: the scramble filter section which includes at least two scrambling filters, selects a scrambling filter in accordance with the data length of the data to be transferred to produce a next cycle scrambling seed value from the present cycle scrambling seed value.

3. On page 15, lines 6-8, please amend as follows:

According to the present invention, there is provided a data processing apparatus, which comprises: the scramble filter section which includes at least two scrambling filters, selects a scrambling filter in accordance with the data length of the data to be transferred, to produce a next cycle scrambling seed value from the present cycle scrambling seed value.

4. On page 15, lines 13-15, please amend as follows:

According to the present invention, there is provided a data processing apparatus, which comprises: the scramble filter section which includes at least two scrambling filters, selects a scrambling filter in accordance with the jumping destination of the data to be transferred, to produce the scrambling seed value.

5. On page 17, lines 5-7 and 10, and page 18, line 2, please amend as follows:

According to the present invention, since a data processing apparatus for scrambling data which are under being transferred or de-scrambling scrambled data which are under being transferred, comprises an ID storing section which stores an ID information relating to a sector which is a scrambling block unit of data under being transferred, which ID information is set by a central processing unit, a sector counter section which counts the number of the sectors in the data under being transferred, an operation section which adds the ID information from the ID storing section and the sector number information from the sector counter section, a scramble

seed value table conversion section which converts the addition result which is inputted from the operation section into a scrambling seed value, a scramble filter of at least one byte which, making a period during which data of a predetermined length is transferred one cycle, produces a next cycle scramble seed value from the present cycle scramble seed value, a selector which selects a scramble seed value which is outputted from the scramble seed table conversion section when the data to be transferred is data at a top of a sector, and selects the scramble seed value which is outputted from the scramble filter section otherwise, to output the selected result to the scramble filter, and the data under being transferred is scrambled or the scrambled data under being transferred is de-scrambled using the scramble seed value which is outputted from the selector, a scrambling processing having a high reliability or a de-scrambling processing in a disc interface section in a DVD system can be carried out, using a correct scramble seed value which is produced by using, not the ID information included in the data under being transferred, but a secured information which is set by a central processing unit. Further, it is possible to perform data transfer of two [[byte]] bytes or more during one cycle, thereby enabling the descrambling process in which data to be operated change continuously, at high speeds.